

Region 2 RCRA Corrective Action Site Fact Sheet

Last Update: February 10, 2000

CARIBBEAN PETROLEUM REFINING, L.P.

EPA ID#: PRD000632182

LOCATION: Luchetti Industrial Park, Rt. 28, Bayamon, Puerto Rico

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Other (Former) Names of Site:

Refining operations began at the site in 1955 under the name of Caribbean Refining Corporation. This facility was purchased in 1962 by the Gulf Oil Corporation, and given the new name Caribbean Gulf Refining Corporation. Chevron Corporation acquired ownership of the facility when it purchased Gulf Oil Corporation in 1984. In 1987, the facility was sold to First Oil Corporation and now operates as an independent refinery under the name of Caribbean Petroleum Refining, Limited Partnership.

Site Description:

Caribbean Petroleum Refining (CPR), LP is located in the Luchetti Industrial Park in Bayamon, Puerto Rico - north of Ft. Buchanan in Bayamon and south of the municipality of Catano.

CPR began operation in 1955 as a refinery. It processes virgin crude oil imported from Venezuela to produce petroleum products such as unleaded gasoline, light and heavy fuel oil, and asphalt. Approximately 38,000 barrels of crude oil are processed per day.

Hazardous wastes managed at the site include API separator sludge, slop oil emulsion solids, heat exchanger bundle, primary oil/water/solids separation, secondary oil/water/solids separation, ignitable, and toxicity characteristic for benzene.

Site Responsibility:

Clean-up at this site is being addressed by the U.S. Environmental Protection Agency (EPA), under authority of the Resource Conservation and Recovery Act (RCRA). However, the Puerto Rico Environmental Quality Board (EQB) participates with EPA in cleanup decision-making and oversight. In 1995, EPA and CPR signed an Administrative Order on Consent (Order) requiring the Company to

conduct RCRA Facility Investigation (RFI), Corrective Measure Study (CMS), Corrective Measure Implementation (CMI) and ultimately cleanup the contamination at the facility.

Government Performance and Results Act (GPRA) Status:

In 1993, Congress passed the Government Performance and Results Act (GPRA), which mandated that all Federal agencies develop strategic plans, establish annual performance plans (which set objective, quantifiable and measurable annual targets and goals), and produce annual program performance reports that compare actual performance to the annual goals. CPR is part of the GPRA.

The goals, as far as RCRA facilities are concerned, are that by 2005, the States and EPA will verify and document that 95 percent of the 1712 high priority RCRA facilities (of which this is one) will have "current human exposures under control," and 70 percent of these facilities will have "migration of contaminated groundwater under control."

Threats and Contaminants:

The RCRA Facility Assessment Report of March 1989 identified 12 Solid Management Units (SWMUs) and 11 Areas of Concern (AOC) with evidence of past releases of hazardous waste and/or constituents to soil. Extensive ground water monitoring at the facility indicate the presence of benzene and toluene in groundwater as well as free product/hydrocarbons floating on top of groundwater.

The nearest surface water body is the Las Lajas Creek which crosses the northwest corner of the facility and was channelized underground. The creek returns to an open channel at a point north of the refinery's wastewater treatment facilities, where the site's effluent and storm water are discharged under a NPDES permit. The creek then flows northward toward San Juan Bay which is located approximately 2 miles to the north-northwest. San Juan Bay is used for commercial, industrial and military activities as well as for recreational activities.

Two on-site groundwater wells at CPR are used for the cooling towers. Several wells located between 0.9 to 2.4 miles from the facility are cross-gradient of the CPR facility and are unaffected by groundwater contamination at the site. These wells are used for industrial and stock purposes.

Cleanup Approach

Cleanup Status/Corrective Action:

The site is being addressed by CPR under EPA oversight in three measures: closure of the equalization basin, Interim Corrective Measures (ICM) and long-term corrective measures directed at cleanup of the entire site.

Response Action Status:

Closure of Equalization Basin: The equalization basin, which is a major source of contamination at the facility, is undergoing EPA approved closure. EPA approved the equalization basin closure on December 3, 1999.

Interim Corrective Measures: An Interim Corrective Measure (ICM), referred to as the "Underground

Recovery System” (URS) , is on-going. This is required in EPA agreement with CPR to monitor and recover free product floating on groundwater in the central part of the facility and in the asphalt loading rack area. Free product recovery in the most contaminated part of the groundwater aquifer is accomplished with an underground recovery system consisting of submersible pumps (ejectors). Three hundred to 700 gallons of free product are recovered per month.

Entire Site: A rigorous program of soil and groundwater investigation is being conducted following EPA’s approval of CPR’s RFI work plan. After the investigation, CPR will submit a RFI Report detailing the contamination profile at the facility which will be used to study various technologies that may be used in cleaning up the facility.

Cleanup Progress:

Over 58,000 gallons of free product/hydrocarbons have been recovered since the operation started in October 1991 and recycled back into the facility’s process stream. The free product is recovered through a network of 41 wells. The remaining amount of free product in the groundwater needing to be recovered will be determined during the on-going RFI investigation. Off-site migration of hydrocarbons is now prevented through this program of actively recovering free product. A site-wide program to clean up the site will be implemented after the on-going soil and groundwater investigation.

Permits Status

CPR has never had a RCRA permit. It operated under interim status and is undergoing closure. It remains regulated under RCRA as a hazardous waste generator.

Site Repository:

The United States Environmental Protection, Region 2, Division of Environmental Planning & Protection, 290 Broadway, 22nd Floor, New York, New York 10007, telephone (212) 637-4168.